

Special Requirements for Bathymetric Data

MARINE SCIENTIFIC RESEARCH REQUESTS

The Government of Canada wishes to inform all parties requesting authorization to conduct marine scientific research in areas under Canada's jurisdiction (meaning Canada's inland waters, territorial sea (0-12NM), exclusive economic zone (12-200NM), and extended continental shelves) that Canada requires copies of all bathymetric data derived from these marine scientific research projects. This includes single and multi-beam data collected in passage to and from the research site as well as the bathymetric data collected at or in the investigation area.

Bathymetric data collected in areas under Canada's jurisdiction must be provided to Fisheries and Oceans Canada's Canadian Hydrographic Service (CHS). In order to ensure that this data can be properly utilized, the Government of Canada requests the following:

1. A metadata profile containing, to the fullest extent possible, the elements in Table 1 be provided when the data is submitted;
2. Copies of all the files associated with the bathymetric data set(s) are submitted;
3. Where possible, the bathymetric data be gridded to the best possible resolution and that this grid is submitted with the data; and,
4. All of the above are concurrently submitted to the IHO Data Centre for Digital Bathymetry (DCDB).

Table 1. Metadata Profile for Bathymetric Data

Originator(s) Organisation
Publication Date
Location(s)
Vessel(s)
Purpose (e.g.: site monitoring)
IHO Category Zone of Confidence (CATZOC)
IHO Order of Survey
Navigation Warning/ Notices to Mariners (where any uncharted hazards detected?)
Start and End Date of Survey
Supplemental data (List any additional information or files associated with this data)
Note: If multi-beam data is collected, backscatter data shall be logged concurrently
Point of Contact (source contact, address and phone #)
Dataset Credit (participants involved in data capture and/or post processing)
Native Data Set Environment (list computer O/ S, processing software and versions used)
Horizontal Positional Accuracy (Accuracy Report, Quantitative Accuracy Assessment)
Technique of Positioning (e.g. : DGPS or RTK GPS)
Vertical Positional Accuracy and are the soundings corrected for vessel draft? (Accuracy Report, Quantitative Accuracy Assessment)
Technique of Sounding (e.g. multi-beam sonar)
Sounder Type (e.g.: Kongsberg EM2040)
Process Description (summary of post processing methods)
Process Date (date when bathymetric dataset was created)
Geodetic Model (Horizontal datum, ellipsoid)
Vertical Coordinate System (vertical datum the soundings are reduced to)

All correspondence with the CHS shall be coordinated by email to: chsinfo@dfo-mpo.gc.ca ; cc: douglas.brunt@dfo-mpo.gc.ca

Hydrographer General of Canada